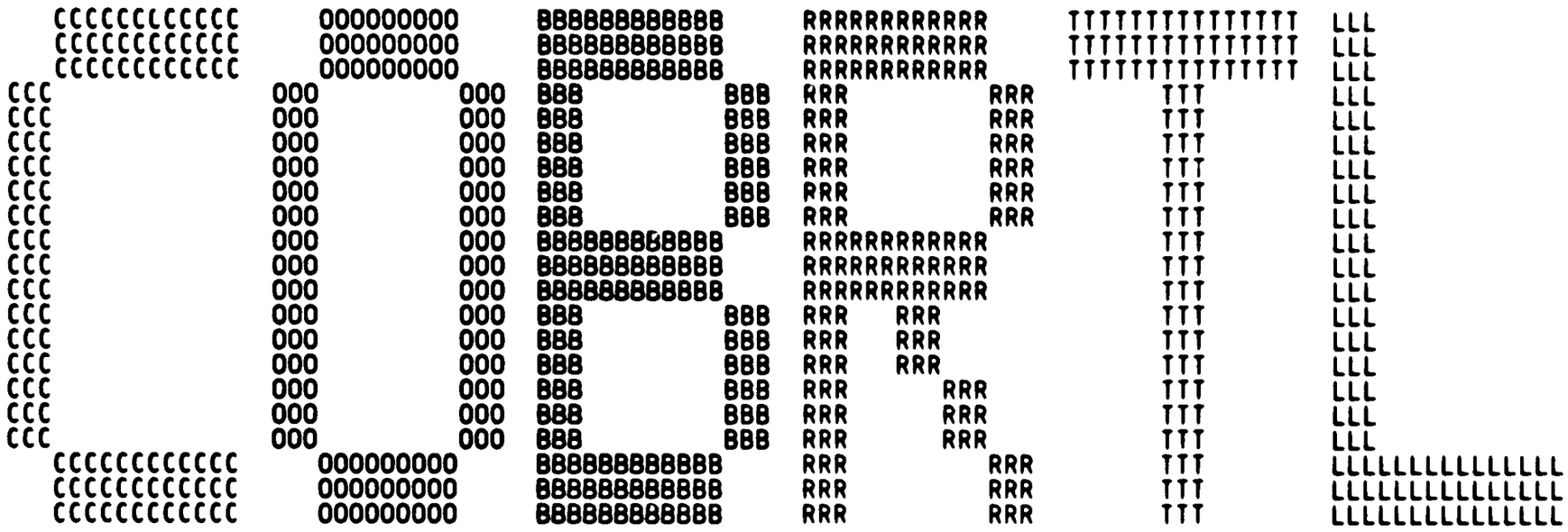
CCCCCCCCCCC 000000000 BBBBBBBBBBBB RRRRRRRRRRR TTTTTTTTTTTTTTT LLL
CCCCCCCCCCC 000000000 BBBBBBBBBBBB RRRRRRRRRRR TTTTTTTTTTTTTTT LLL
CCCCCCCCCCC 000000000 BBBBBBBBBBBB RRRRRRRRRRR TTTTTTTTTTTTTTT LLL
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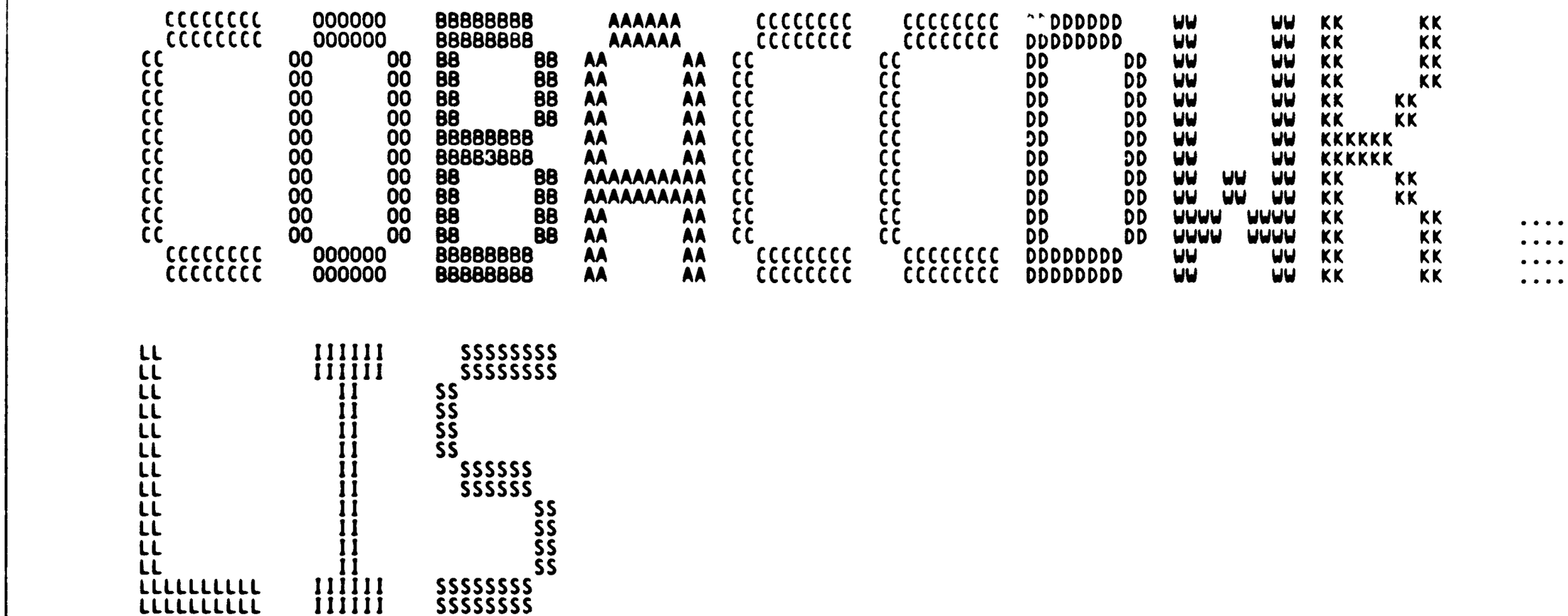
CCC 000 000 BBB BBB RRR RRR TTT LLL
CCC 000 000 BBB BBB RRR RRR TTT LLL
CCCCCCCCCCC 000000000 BBBBBBBBBBBB RRR RRR TTT LLLLLLLLLLLLLLL
CCCCCCCCCCC 000000000 BBBBBBBBBBBB RRR RRR TTT LLLLLLLLLLLLLLL
CCCCCCCCCCC 000000000 BBBBBBBBBBBB RRR RRR TTT LLLLLLLLLLLLLLL


COBOL
IS
....

```
;     1          0001  0 MODULE COBSACC_DAYWEEK (
;     2          0002  0                     IDENT = '1-006'         ! file: COBACCDWK.B32 EDIT:MLJ1006
;     3          0003  0                     ) =
;     4          0004  1 BEGIN
;     5          0005  1 !
;     6          0006  1 !*****************************************************************************
;     7          0007  1 !*                                                                           *
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;    25          0025  1 !*                                                                           *
;    26          0026  1 !*                                                                           *
;    27          0027  1 !*****************************************************************************
;    28          0028  1 !
;    29          0029  1 !++
;    30          0030  1 ! FACILITY:     COBOL SUPPORT
;    31          0031  1 !
;    32          0032  1 ! ABSTRACT
;    33          0033  1 !
;    34          0034  1 !
;    35          0035  1 !
;    36          0036  1 ! ENVIRONMENT:  Vax-11 User Mode
;    37          0037  1 !
;    38          0038  1 ! AUTHOR: MLJ , CREATION DATE: 16-JAN-1979
;    39          0039  1 !
;    40          0040  1 ! MODIFIED BY:
;    41          0041  1 !
;    42          0042  1 ! 1-001 - Original. MLJ 16-JAN-1979
;    43          0043  1 ! 1-002 - Added boilerplate and comments. RKR 18-JULY-1979
;    44          0044  1 ! 1-003 - Declare psects via library macro.  RKR 23-AUG-1979
;    45          0045  1 ! 1-004 - Change symbolic name of LIBRARY. RKR 1-OCT-79
;    46          0046  1 ! 1-005 - Cosmetic changes.   RKR 18-OCT-79
;    47          0047  1 ! 1-006 - Rewrite to use simplified algorithm.  MLJ 02-Aug-81
;    48          0048  1 !
;    49          0049  1 !--
;    50          0050  1
;    51          0051  1 !<BLF/PAGE>
```

```
;    53          0052  1 !
;    54          0053  1 ! SWITCHES
;    55          0054  1 !
;    56          0055  1
;    57          0056  1 SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
;    58          0057  1
;    59          0058  1 !
;    60          0059  1 ! LINKAGES
;    61          0060  1 !
;    62          0061  1 !       NONE
;    63          0062  1 !
;    64          0063  1 ! TABLE OF CONTENTS:
;    65          0064  1 !
;    66          0065  1 FORWARD ROUTINE
;    67          0066  1
;    68          0067  1         COB$ACC_DAYWEEK : NOVALUE;
;    69          0068  1
;    70          0069  1 ! INCLUDE FILES
;    71          0070  1 !
;    72          0071  1
;    73          0072  1 REQUIRE 'RTLIN:RTLPSECT' ;              ! Macros for declaring psects
;    74          0167  1 LIBRARY 'RTLSTARLE';
;    75          0168  1
;    76          0169  1 !
;    77          0170  1 ! MACROS
;    78          0171  1 !
;    79          0172  1 !       NONE
;    80          0173  1 !
;    81          0174  1 ! EQUATED SYMBOLS
;    82          0175  1 !
;    83          0176  1 !       NONE
;    84          0177  1 !
;    85          0178  1 ! PSECT DECLARATIONS:
;    86          0179  1 !
;    87          0180  1 DECLARE_PSECTS (COB) ;                  ! Psects for COB$ facility
;    88          0181  1
```

```
;    90          0182  1 GLOBAL ROUTINE COBSACC_DAYWEEK(DST): NOVALUE=
;    91          0183  1 !
;    92          0184  1 !++     FUNCTIONAL DESCRIPTION
;    93          0185  1 !
;    94          0186  1 !       Returns day_of_week as 1 - 7 corresponding to Mon. - Sun.
;    95          0187  1 !
;    96          0188  1 ! FORMAL PARAMETERS:
;    97          0189  1 !
;    98          0190  1 !       DST.wt.ds       Address of descriptor of string to receive ans.
;    99          0191  1 !
;   100          0192  1 ! IMPLICIT INPUTS:
;   101          0193  1 !
;   102          0194  1 !       Date as supplied by $GETTIM.
;   103          0195  1 !
;   104          0196  1 ! IMPLICIT OUTPUTS:
;   105          0197  1 !
;   106          0198  1 !       NONE
;   107          0199  1 !
;   108          0200  1 ! ROUTINE VALUE:
;   109          0201  1 ! COMPLETION CODES:
;   110          0202  1 !
;   111          0203  1 !       NONE
;   112          0204  1 !
;   113          0205  1 ! SIDE EFFECTS:
;   114          0206  1 !
;   115          0207  1 !       NONE
;   116          0208  1 !
;   117          0209  1 !--
;   118          0210  1 !
;   119          0211  2     BEGIN
;   120          0212  2     MAP
;   121          0213  2         DST:            REF BLOCK[,BYTE];       ! Pointer to destination descriptor
;   122          0214  2     LOCAL
;   123          0215  2         SYSTIM:         VECTOR[2],              ! Buffer for $GETTIM
;   124          0216  2         QUOTIENT,                               ! Quotient from division
;   125          0217  2         REMAINDER,                              ! Remainder (discarded)
;   126          0218  2         BUFFER;                                 ! Buffer for output character
;   127          0219  2     BUILTIN
;   128          0220  2         EDIV;
;   129          0221  2
;   130          0222  2
;   131          0223  2     !+
;   132          0224  2     ! Get the system date and time.  Divide by the number of least significant
;   133          0225  2     ! bits in a day (864 x 10**9) to get the number of days since 17-Nov-1858.
;   134          0226  2     ! Bias this result to account for day 0 being a Wednesday.  Then, take the
;   135          0227  2     ! result modulo 7 to get the day of the week such that Monday results in 0.
;   136          0228  2     ! Finally, bias the result by ASCII '1' to get the answer as desired and
;   137          0229  2     ! return it.
;   138          0230  2     !-
;   139          0231  2     $GETTIM(TIMADR=SYSTIM);
;   140          0232  2     EDIV(%REF(1000000000), SYSTIM, QUOTIENT, REMAINDER);        ! Div by 10**9
;   141          0233  2     QUOTIENT = .QUOTIENT / 864;                                 ! Finish
;   142          0234  2     BUFFER = ((.QUOTIENT + 2) MOD 7) + %C'1';
;   143          0235  2     CH$COPY(1, BUFFER, %C' ', .DST[DSC$W_LENGTH], .DST[DSC$A_POINTER]);
;   144          0236  1     END;
```

```
                                                                .TITLE  COB$ACC_DAYWEEK
                                                                .IDENT  \1-006\

                                                                .EXTRN  SYS$GETTIM

                                                                .PSECT  _COB$CODE,NOWRT,  SHR,  PIC,2

                                                     003C 00000 .ENTRY  COB$ACC_DAYWEEK, Save R2,R3,R4,R5          ; 0182
                                          5E           0C  C2 00002 SUBL2  #12, SP                                ;
                                                 04    AE  9F 00005 PUSHAB SYSTIM                                 ; 0231
                                00000000G  00          01  FB 00008 CALLS  #1, SYS$GETTIM                        ;
          50            51        04    AE 3B9ACA00    8F  7B 0000F EDIV   #1000000000, SYSTIM, QUOTIENT, REMAINDER ; 0232
                                          51 00000360    8F  C6 00019 DIVL2  #864, QUOTIENT                         ; 0233
          7E            02              51             01  7A 00020 EMUL   #1, QUOTIENT, #2, -(SP)                 ; 0234
          50            50              8E             07  7B 00025 EDIV   #7, (SP)+, R0, R0                      ;
                                          6E       31    A0  9E 00029 MOVAB  49(R0), BUFFER                         ;
                                          50       04    AC  D0 0002E MOVL   DST, R0                                ; 0235
          60            20              6E             01  2C 00032 MOVC5  #1, BUFFER, #32, (R0), @4(R0)          ;
                                                 04    B0      00037 RET                                          ;
                                                               04 00039                                            ; 0236

; Routine Size:  58 bytes,    Routine Base:  _COB$CODE + 0000

;  145          0237  1
;  146          0238  0 END ELUDOM



;                                    PSECT SUMMARY

;      Name                        Bytes                          Attributes

;  _COB$CODE                         58  NOVEC,NOWRT,  RD ,  EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(2)


;                                Library Statistics

;                                          -------- Symbols --------      Pages       Processing
;      File                                 Total    Loaded   Percent      Mapped      Time

;  _$255$DUA28:[SYSLIB]STARLET.L32;1         9776         5         0         581       00:00.7



;                                     COMMAND QUALIFIERS

;       BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS$:COBACCDWK/OBJ=OBJ$:COBACCDWK MSRC$:COBACCDWK/UPDATE=(ENH$:COBACCDWK
```

```
;       )

; Size:          58 code + 0 data bytes
; Run Time:        00:02.4
; Elapsed Time:    00:13.8
; Lines/CPU Min:    5876
; Lexemes/CPU-Min: 20000
; Memory Used:  42 pages
; Compilation Complete
```

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TYPEMAIN
LIS

COBPROLOG
REQ

COBACCDAT
LIS

COBACCDWK
LIS

UNLOCK
LIS

UTILSUBS
LIS

INTPAR
SDL

COBDEF
REQ

COBACCDAY
LIS

COBACCECV
LIS

COBRTL

COBLNK
REQ

COBRTL
MAP